

Work Order ID 101601

May-13-13 1:09:41 PM

Item ID: D3208-1

Revision ID:

Item Name: Doubler

Start Date: 5/15/13 Start Qty: 10.00

Required Date: 5/31/13 Req'd Qty: 10.00

Reference:

Approvals: Process Plan: MLS
QC:

Accept

10***10******101601***

Page 1

Setup Start ***NS1***Stop ***NS2******N900040100***

Cust Item ID:

Customer:

Run Start ***NR1***Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionDate: 13-05-15

Tooling:

Date:

Date:

SPC (Y/N):

Date:

Draw Nbr

Revision Nbr

Set Up/
Run HoursTool ID Tool # Plan
Code Accept Reject
Qty Qty Reject
Number Insp.
Stamp

D3208

C

0.00

100

0.00

100

0.00

Waterjet

0.00

FLOW CNC Waterjet

0.00

SHEAR

0.00

Memo

0.00

1-Cut as per Dwg

0.00

Dwg Rev: C

0.00

Prog Rev: C

0.00

2-Deburr if necessary

110

0.00

110

0.00

QC

0.00

Quality Control

0.00

115

0.00

QC2- Inspect parts off machine FAI/FAIB

0.00

Small Fab

0.00

Memo

0.00

115

0.00

QC

0.00

Quality Control

0.00

S
2
8
137.2410 0 Ae
13.07.2310 0 Ae
13.07.23

10

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/>	General									
	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced						
	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure						
	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld						
	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled						
	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Other						
	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/>						
	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/>						
	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/>							
	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/>							
	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/>							
	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/>							

Work Order ID 101601

101601

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May-13-13 1:09:41 PM

Item ID: D3208-1

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Doubler

Start Date: 5/15/13 Start Qty: 10.00 *10*

Required Date: 5/31/13 Req'd Qty: 10.00 *10*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan:

Date: Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

Bend as per dwg
NC BRAKE

0.00

120

Brake NC

Memo

0.00

10

SB
13/07/24

130

QC5- Inspect part completeness to step on W/O

0.00

AS
21

10

130

QC

Quality Control

Memo

0.00

137.24

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Hand Finishing

Memo

0.00

10

13.7.26

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/>	General									
	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced						
	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure						
	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld						
	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled						
	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved							
	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong							
	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge							
	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Other							
	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration								
	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence								
	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions								

Work Order ID 101601

May-13-13 1:09:42 PM

101601

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Item ID: D3208-1

Accept

N900040100

Setup

Start ***NS1***

Revision ID:

Stop

NS2

Item Name: Doubler

Start Date: 5/15/13 Start Qty: 10.00 ***10***

Cust Item ID:

Required Date: 5/31/13 Req'd Qty: 10.00 ***10***

Customer:

Reference:

Approvals: Process Plan:

Date: Tooling:

Date:

Run

Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

150

QC

Quality Control

QC7-Inspect Chemical Conversion Coat

0.00

Scrap

⑤ 130725

DAS
09

160

160

Packaging

Packaging

Identify as per dwg & Stock Location: 9202

0.00

Memo

0.00

R3/11/15 (10)

Pb>

170

170

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

MAY 1308-12

MF 13-8-02

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DOA: AH Date: 13/08/13QA Closed: AH Date: 13/08/13

Work Order: <u>101601</u>	DISPOSITION				AGAINST DEPARTMENT/PROCESS			
Part No. <u>D3208-1</u>	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input checked="" type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. <u>13-2928</u>	Scrap <input checked="" type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator <input checked="" type="checkbox"/>	<u>13/07/13</u>	<u>#</u>	<u>100</u>	Fewer when working closed that the mat. that was used was very open was 6061 should have been 2024. employee vendor thicker not mat.	<u>DAS</u> <u>16</u> <u>9-08</u>	All part are scars - mat strength not sufficient.	<u>Ac</u> <u>13.08.01</u>	<u>DAS</u> <u>16</u> <u>9-08</u> <u>13/08/01</u>	<u>DAS</u> <u>16</u> <u>9-08</u>
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

Fault Category

FAULT CATEGORY

Landing Gear	Bending	Bend	Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld
	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
	Cuffs	Contamination	Maintenance	Part Moved	
	Heat Treat	Countersink	Mislabeled	Positioned Wrong	
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	
	Ripples in Bend	Drill Holes	Offset	<u>AC. operat. error.</u>	
	Torque Waves in Extrusion	Drawing	Out of Calibration		
	Turning Sequence	Finish	Out of Sequence		
	Wave/Twist in Tube	Folio	Outside Dimensions		

Picklist Print

Page 1

May-13-13 1:09:41 PM

Work Order ID: 101601

Parent Item: D3208-1

Parent Item Name: Doubler

Start Date: 5/15/13

Required Date: 5/31/13

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP: B04.05.25Material changed for Step 4KJ/JLM IPP REV B:PER REV B 12-03-23
JLM VERIFIED BY:EC IPP REV:C 12.04.20 as per dwg rev.C DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No			100	sf	437.0877	0.1645	1.731579 12.6350		Apnl 13.07.23 k 74	

Location	Loc Qty	Loc Code
MAT022	437.0876922	
120605	65.8254832	
121197	57.187894	
122136	31.78	
123217	20.894315	
124987	261.4	

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced			
				<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure			
				<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld			
				<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled			
				<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved				
				<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong				
				<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge				
				<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Other				
				<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration					
				<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence					
				<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions					

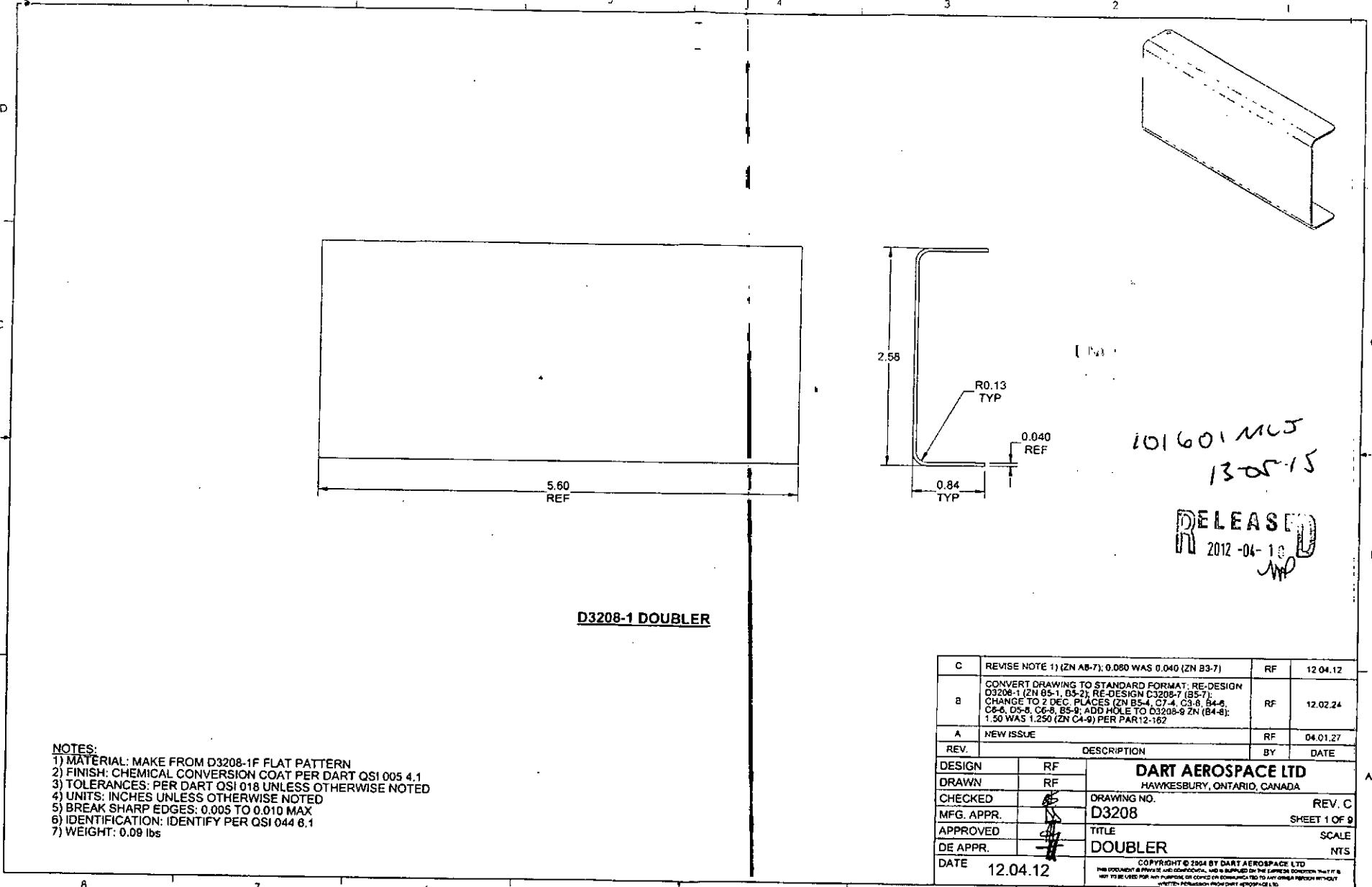
DART AEROSPACE LTD	Work Order:	101601
Description: Doubler	Part Number:	D3208-1
Inspection Dwg: D3208 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	<u>Ae</u>	Audited by:	<u>BGS</u> <u>???</u>	Preliminary Approval:	
Date:	13.07.23	Date:	<u>13.7.23</u>	Date:	

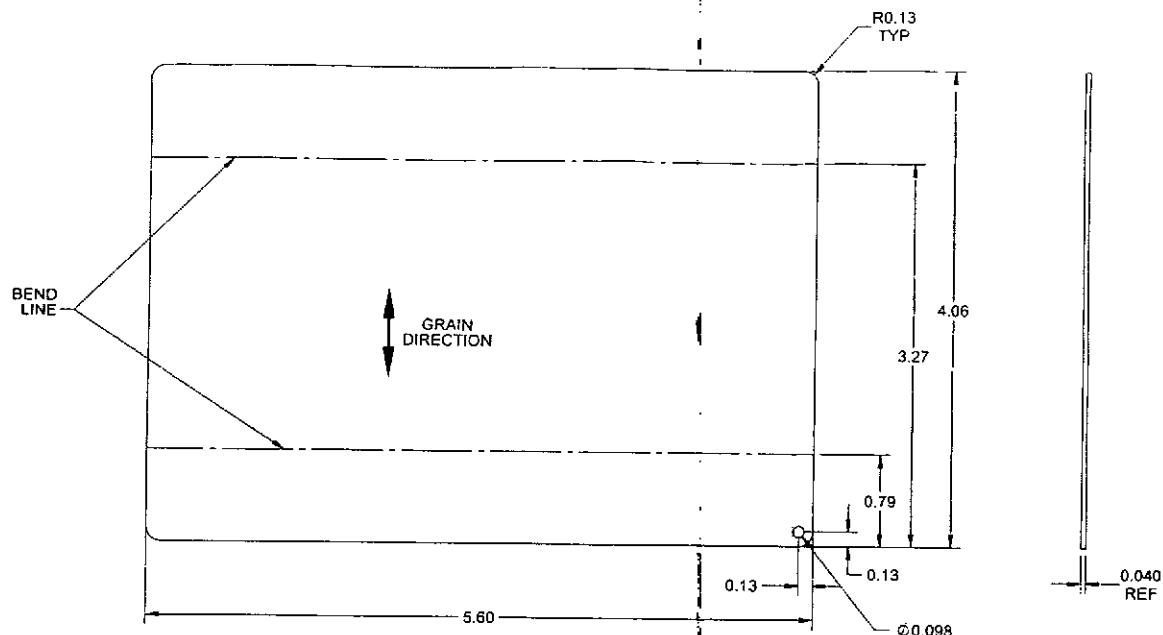
Rev	Date	Change	Revised by	Approved
A	12.05.22	New Issue	KJ	MM

25





101601

D3208-1F DOUBLER FLAT PATTERN

RELEASED
2012-04-18

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.040 THICK PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 REF DART SPEC M2024T3S.040
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.09 lbs

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<input checked="" type="checkbox"/>	DRAWING NO.	
MFG. APPR.	<input checked="" type="checkbox"/>	REV. C	
APPROVED	<input checked="" type="checkbox"/>	D3208	
DE APPR.	<input checked="" type="checkbox"/>	TITLE	
DATE	12.04.12	SCALE	
		NTS	
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